

INTERNATIONAL PRELIMINARY EXAMINATION REPORT
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P200200701 WO	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/DK 03/00674	International filing date (day/month/year) 09.10.2003	Priority date (day/month/year) 11.10.2002
International Patent Classification (IPC) or both national classification and IPC G06T17/10		
Applicant LEGO AS ET AL.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

I ☒ Basis of the opinion

II ☐ Priority

III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability



IV ☐ Lack of unity of invention

V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

VI ☐ Certain documents cited

VII ☐ Certain defects in the international application

VIII ☐ Certain observations on the international application

Date of submission of the demand 19.04.2004	Date of completion of this report 30.07.2004
Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized Officer Meseguer Mayoral, J. Telephone No. +31 70 340-3312 <div style="text-align: right;">  </div>

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/DK 03/00674**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-44 as originally filed

Claims, Numbers

1-17 as originally filed

Drawings, Sheets

1/10-10/10 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-17
	No: Claims	
Inventive step (IS)	Yes: Claims	1-17
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-17
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Reference is made to the following document:

D1: WO-A-0043959

2. The present application relates to a virtual reality modelling tool and a method to determine whether two virtual geometrical objects may be connected to each other.

Document D1 is considered to be the closest prior art. It discloses a method of generating a computer readable model of a geometrical object constructed from a plurality of interconnectable construction elements (*see D1, abstract*), but it does not have a method to detect whether different pieces are connectable; thus, all the pieces are connectable to each other, which makes the virtual model less accurate.

The problem solved by the present application can be seen as how to create a more accurate virtual model of a geometrical object formed by a plurality of construction elements.

Thus, the features that make the Application new and inventive are the data structures that represent the connection elements of each construction element, the determination of the connection elements of two construction elements located in a predetermined proximity to each other, and the use of the data structures to determine whether the connection of those two construction elements is possible.

3. The Application can be used to model the connections between virtual reality objects and an industrial application is therefore given.
- 4.1 **Claim 13** claims a data processing system with means to carry out the method claimed in claim 1. Therefore, the arguments set out in point 2 above are also valid for claim 13.

Thus, claim 13 also fulfills the requirements of Article 33 PCT.

- 4.2 **Claims 16 and 17** claim a computer program and a computer program product with means to carry out the method claimed in claim 1. Therefore, the arguments set out in point 2 above are also valid for claims 16 and 17.
Thus, claims 16 and 17 also fulfill the requirements of Article 33 PCT.
- 4.3 **Claims 2-12, 14 and 15** are dependent claims and are referred to further embodiments of the virtual reality modelling method and tool, as given by claims 1 and 13. The dependent claims 2-12, 14 and 15 also fulfill the requirements of Article 33 PCT.
- 5.1 To meet the requirements of Rule 6.2(b) PCT, the claims should have been provided with reference signals placed in parentheses.
- 5.2 To meet the requirements of Rule 6.3(b) PCT the independent claims should have been drafted in the two-part form.
- 6 Finally, to meet the requirements of Rule 5.1(a)(ii) PCT, the Applicant should have identified document D1 in the description and the relevant background art disclosed therein should have been briefly discussed.